

Week #6 Fall 2023

# Problem of the Week



An instructor had a class with only 4 students: Thomas, Billy, Betty, and Annabelle. The instructor did not know the students names, so he asked them. One of the students (Betty) told a lie. The shortest student said “The third oldest student is Thomas.” The third oldest student said “I am not Annabelle!” The second oldest student said “Billy? That’s the oldest student.” The oldest student remained silent. Which student is Annabelle?

Undergraduates may submit solutions to the Mathematics Department office, 1150 FAB **or** by email to [mathpow@wayne.edu](mailto:mathpow@wayne.edu) by noon 11/7/2023. Include your name, ID number, and whether you have completed Math 2030 (or higher). For more information go to <https://clas.wayne.edu/math>. Solutions will be posted online and throughout the math department after the deadline.